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Sequence Listing was accepted.

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Reviewer: Keisha Douglas

Timestamp: [year=2008; month=10; day=3; hr=15; min=50; sec=21; ms=531;]

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Application No: 10595388 Version No: 1.0

Input Set:

Output Set:

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Finished: 2008-09-02 18:55:23.981
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Total Errors: 0
No. of SeqIDs Defined: 20
Actual SeqID Count: 20

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SEQUENCE LISTING

<110> Istituto Superiore di Sanita
National Institutes of Health
Robbins, Paul
Rosenberg, Steven
Maccalli, Cristina

<120> COLORECTAL ANTIGEN

<130> 134-03

<140> 10595388

<141> 2008-09-02

<150> US 60/512,040

<151> 2003-10-15

<160> 20

<170> PatentIn version 3.5

<210> 1

<211> 1413

<212> DNA

<213> Homo sapiens

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<221> CDS

<222> (85)..(1395)

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<221> misc_feature

<222> (1180)..(1240)

<223> nucleotide sequence encoding the immunogenic peptide

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Met Ala Phe Met Thr Arg Lys Leu Trp

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Asp Leu Glu Gln Gln Val Lys Ala Gln Thr Asp Glu Ile Leu Ser Lys

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15

20

25

gat cag aag ata gcg gcc cta gag gac ctg gtg cag acc ctc cgg cca 207

Asp Gln Lys Ile Ala Ala Leu Glu Asp Leu Val Gln Thr Leu Arg Pro

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cac cca gcc gag gca acc ctg cag cgg cag gag gaa ctg gag acg atg 255

His Pro Ala Glu Ala Thr Leu Gln Arg Gln Glu Glu Leu Glu Thr Met

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50

55

tgt gtg cag ctg cag cgg cag gtc agg gag atg gag cgg ttc ctc agt	303
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Glu Ser Lys Thr Val Ser Glu His Gly Glu Arg Asp Trp Met Thr Ala	
90 95 100 105	
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Lys Lys Phe Trp Lys Pro Gly Asp Ser Leu Ala Pro Pro Glu Val Asp	
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Glu Gly Asp Thr Gln Val Thr Pro Val Pro Gly Gly Ala Arg Leu Arg	
140 145 150	
 acc ctc gag ccc atc ccg ctg aag ctc tac cgg aat ggc atc atg atg	591
Thr Leu Glu Pro Ile Pro Leu Lys Leu Tyr Arg Asn Gly Ile Met Met	
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Phe Asp Gly Pro Phe Gln Pro Phe Tyr Asp Pro Ser Thr Gln Arg Cys	
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Leu Arg Asp Ile Leu Asp Gly Phe Phe Pro Ser Glu Leu Gln Arg Leu	
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Tyr Pro Asn Gly Val Pro Phe Lys Val Ser Asp Leu Arg Asn Gln Val	
205 210 215	
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Tyr Leu Glu Asp Gly Leu Asp Pro Phe Pro Gly Glu Gly Arg Val Val	
220 225 230	
 ggc agg cag cgg atg cac aag gcc ttg gac agg gtg gag gag cac cca	831
Gly Arg Gln Arg Met His Lys Ala Leu Asp Arg Val Glu Glu His Pro	
235 240 245	
 ggc tcc agg atg act gct gag aaa ttt ctg aac agg ctc ccc aag ttt	879
Gly Ser Arg Met Thr Ala Glu Lys Phe Leu Asn Arg Leu Pro Lys Phe	
250 255 260 265	
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270 275 280	
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Val	Glu	Thr	Pro	Thr	Leu	Ala	Ala	Glu	Arg	Glu	Arg	Ser	Gln	Glu	Ser	
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Pro	Asn	Thr	Pro	Ala	Pro	Pro	Leu	Ser	Met	Leu	Arg	Ile	Lys	Ser	Glu	
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Ala	Phe	Glu	Ile	Phe	Ser	Thr	Phe	Pro	Pro	Thr	Leu	Tyr	Gln	Asp	Asp	
			365					370					375			
aca	ctc	acg	ctg	cag	gct	gca	ggc	ctt	gtg	ccc	aaa	gca	gca	ctg	ctg	1263
Thr	Leu	Thr	Leu	Gln	Ala	Ala	Gly	Leu	Val	Pro	Lys	Ala	Ala	Leu	Leu	
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ctg	cgg	gca	cgc	cga	gcc	ccg	aag	tcc	agc	ctg	aaa	ttc	agt	cct	ggc	1311
Leu	Arg	Ala	Arg	Arg	Ala	Pro	Lys	Ser	Ser	Leu	Lys	Phe	Ser	Pro	Gly	
		395				400					405					
ccc	tgt	ccc	ggc	ccc	ggc	ccc	ggc	ccc	agg	ccc	ggc	ccc	ggc	ccc	ggc	1359
Pro	Cys	Pro	Gly	Pro	Gly	Pro	Gly	Pro	Ser	Pro	Gly	Pro	Gly	Pro	Gly	
410					415					420					425	
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 <213> Homo sapiens

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			20					25					30			

Glu Asp Leu Val Gln Thr Leu Arg Pro His Pro Ala Glu Ala Thr Leu
35 40 45

Gln Arg Gln Glu Glu Leu Glu Thr Met Cys Val Gln Leu Gln Arg Gln
50 55 60

Val Arg Glu Met Glu Arg Phe Leu Ser Asp Tyr Gly Leu Gln Trp Val
65 70 75 80

Gly Glu Pro Met Asp Gln Glu Asp Ser Glu Ser Lys Thr Val Ser Glu
85 90 95

His Gly Glu Arg Asp Trp Met Thr Ala Lys Lys Phe Trp Lys Pro Gly
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Asp Ser Leu Ala Pro Pro Glu Val Asp Phe Asp Arg Leu Leu Ala Ser
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Leu Gln Asp Leu Ser Glu Leu Val Val Glu Gly Asp Thr Gln Val Thr
130 135 140

Pro Val Pro Gly Gly Ala Arg Leu Arg Thr Leu Glu Pro Ile Pro Leu
145 150 155 160

Lys Leu Tyr Arg Asn Gly Ile Met Met Phe Asp Gly Pro Phe Gln Pro
165 170 175

Phe Tyr Asp Pro Ser Thr Gln Arg Cys Leu Arg Asp Ile Leu Asp Gly
180 185 190

Phe Phe Pro Ser Glu Leu Gln Arg Leu Tyr Pro Asn Gly Val Pro Phe
195 200 205

Lys Val Ser Asp Leu Arg Asn Gln Val Tyr Leu Glu Asp Gly Leu Asp
210 215 220

Pro Phe Pro Gly Glu Gly Arg Val Val Gly Arg Gln Arg Met His Lys
225 230 235 240

Ala Leu Asp Arg Val Glu Glu His Pro Gly Ser Arg Met Thr Ala Glu
245 250 255

Lys Phe Leu Asn Arg Leu Pro Lys Phe Val Ile Arg Gln Gly Glu Val

260

265

270

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Ala Glu Arg Glu Arg Ser Gln Glu Ser Pro Asn Thr Pro Ala Pro Pro
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Leu Ser Met Leu Arg Ile Lys Ser Glu Asn Gly Glu Gln Ala Phe Leu
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Leu Met Met Gln Pro Asp Asn Thr Ile Gly Asp Val Arg Ala Leu Leu
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Ala Gln Ala Arg Val Met Asp Ala Ser Ala Phe Glu Ile Phe Ser Thr
 355 360 365

Phe Pro Pro Thr Leu Tyr Gln Asp Asp Thr Leu Thr Leu Gln Ala Ala
 370 375 380

Gly Leu Val Pro Lys Ala Ala Leu Leu Leu Arg Ala Arg Arg Ala Pro
 385 390 395 400

Lys Ser Ser Leu Lys Phe Ser Pro Gly Pro Cys Pro Gly Pro Gly Pro
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Ser Pro Ser Pro Gln
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Thr Ala Lys Lys Phe Trp Lys Pro Gly Asp Ser Leu Ala Pro Pro Glu
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Val Asp Phe Asp Arg Leu Leu Ala Ser Leu Gln Asp Leu Ser Glu Leu
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Val Val Gly Arg Gln Arg Met His Lys Ala Leu Asp Arg Val Glu Glu
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His Pro Gly Ser Arg Met Thr Ala Glu Lys Phe Leu Asn Arg Leu Pro
180 185 190

Lys Phe Val Ile Arg Gln Gly Glu Val Ile Asp Ile Arg Gly Pro Ile
195 200 205

Arg Asp Thr Leu Gln Asn Cys Cys Pro Leu Pro Ala Arg Ile Gln Glu
210 215 220

Ile Val Val Glu Thr Pro Thr Leu Ala Ala Glu Arg Glu Arg Ser Gln
225 230 235 240

Glu Ser Pro Asn Thr Pro Ala Pro Pro Leu Ser Met Leu Arg Ile Lys
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Ser Glu Asn Gly Glu Gln Ala Phe Leu Leu Met Met Gln Pro Asp Asn
260 265 270

Thr Ile Gly Asp Val Arg Ala Leu Leu Ala Gln Ala Arg Val Met Asp
275 280 285

Ala Ser Ala Phe Glu Ile Phe Ser Thr Phe Pro Pro Thr Leu Tyr Gln
290 295 300

Asp Asp Thr Leu Thr Leu Gln Ala Ala Gly Leu Val Pro Lys Ala Ala
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35 40 45

Leu Arg Ala Arg Arg Ala Pro Lys Ser Ser Leu Lys Phe Ser Pro Gly
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Pro Cys Pro Gly Pro Gly Pro Gly Pro Ser Pro Gly Pro Gly Pro Gly
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Ser Ser Pro Cys Pro Gly Pro Ser Pro Ser Pro Gln
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